

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 79-134

NPDES PERMIT NO. CA0038016

WASTE DISCHARGE REQUIREMENTS FOR:

CITY OF ST. HELENA  
NAPA COUNTY

I. FINDINGS

The California Regional Water Quality Control Board San Francisco Bay Region, (hereinafter Board) finds that:

1. The City of St. Helena (hereinafter discharger) submitted a Report of Waste Discharge dated August 20, 1979, requesting a permit to discharge waste under the National Pollutant Discharge Elimination System while reclamation lands and facilities are being secured.
2. The discharger presently discharges an average daily flow of about 0.8 million gallons per day (mgd) of municipal wastewater containing pollutants into the Napa River for a period of about two months per year during the wet weather season.
3. The point of discharge into the Napa River, a water of the United States, is at 30° 30' 10" latitude and 122° 26' 15" longitude.
4. Waste flow to the oxidation ponds varies from a monthly average of 0.3 million gallons per day (mgd) in dry weather to approximately 1.0 mgd in wet weather. The waste is stored for discharge until flow in the Napa River affords a ten to one dilution.
5. The report of waste discharge proposes that the present discharge to Napa River continue until land is secured and facilities are constructed to provide total reclamation of the wastewater.
6. A Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) was adopted by the Board in April 1975. The Basin Plan contains water quality objectives for the Napa River.
7. The beneficial uses of the Napa River downstream from the point of discharge are:
  - a. Domestic water supply for irrigating family gardens.
  - b. Agricultural water supply for stock watering, irrigation and frost protection.
  - c. Water contact recreation.
  - d. Fish migration and habitat.
  - e. Preservation and enhancement of fish, wildlife and other aquatic resources.
  - f. Esthetic enjoyment.

8. The waste discharge from the City of St. Helena was governed by the NPDES Permit and Order Nos. 74-140 and 79-78 adopted on November 19, 1974, and July 17, 1979, respectively. This Board's Resolution No. 79-6 of intent regarding acceptable alternative for City of St. Helena's wastewater disposal was adopted on April 17, 1979. The Order Nos. 74-140 and 79-78 and Resolution No. 79-6 are no longer applicable.
9. The Basin Plan prohibits discharge of wastewater which has characteristics of concern to beneficial uses into any nontidal water.
10. The Board finds that the Napa River is a nontidal water at St. Helena and the discharger will comply with Finding 9 when the proposed total reclamation of wastewater begins.
11. The discharger adopted an Environmental Impact Report (EIR) on August 23, 1979, in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq).
12. The EIR recommended total reclamation of the wastewater and stated as follows. The dust, noise, and nuisance of traffic delays during construction, and the temporary disruptions of vegetation and wildlife, although constituting adverse effects, are only of short duration. On the other hand, there will be a significant enhancement of the long-term productivity from the 200-plus acres that will be irrigated and by the improvement of the river quality because of discontinuance of wastewater discharge.
13. Wastewater reclamation will be covered by a different set of waste discharge requirements adopted by the Board.
14. Effluent limitations, toxic and pretreatment effluent standards established pursuant to Sections 208(b), 301, 304, and 307 of the Federal Water Pollution Control Act are applicable to the discharge.
15. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
16. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, and to the provisions of the Federal Water Pollution Control Act, as amended, and regulations and guidelines adopted thereunder, that the discharger shall comply with the following:

A. Discharge Prohibitions

1. This wastewater discharge to the Napa River is prohibited.

2. The interim discharge to the Napa River while reclamation land and facilities are being secured is prohibited at any time that the volumetric dilution in the river is equal to or less than 10:1 (river flow to wastewater discharge).
3. There shall be no bypass or overflow of untreated wastewater to waters of the State either at the treatment plant or from the collection system.
4. The average dry weather waste flow to the oxidation ponds shall not exceed 0.5 mgd. Average shall be determined over three consecutive months each year.

B. Effluent Limitations

1. Prior to total reclamation of the wastewater, the following effluent limitations shall apply:

- a. The discharge of an effluent in excess of the following limits is prohibited:

<u>Constituents</u>	<u>Units</u>	<u>Limitation</u>
(1) BOD	mg/l	40 (30 day average) maximum

(2) Settleable Matter:

- (a) Arithmetic average of any 6 or more samples collected on any day
- |  |         |             |
|--|---------|-------------|
|  | ml/l-hr | 0.5 maximum |
|--|---------|-------------|

- (b) 80% of all individual samples collected during maximum flow over any 30-day period
- |  |  |             |
|--|--|-------------|
|  |  | 0.4 maximum |
|--|--|-------------|

- (c) Any sample
- |  |  |             |
|--|--|-------------|
|  |  | 1.0 maximum |
|--|--|-------------|

- b. The discharge shall not have a pH of less than 6.5 nor greater than 8.5.

- c. In any representative set of samples the waste as discharged shall meet the following limit of quality:

Toxicity: The survival of test organisms acceptable to the Board in 96-hour bioassays of the effluent shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for 10 consecutive samples.

- d. The discharger shall operate the treatment facilities to maximize compliance with the following:

The total coliform bacteria for a median of five consecutive effluent samples shall not exceed 240 per 100 milliliters. Any single sample shall not exceed a most probable number (MPN) of 10,000 total coliform bacteria when verified by a repeat sample taken within 48 hours.

2. Representative samples of the effluent shall not exceed the following limits by more than the percentage of time indicated: (a)

<u>Constituent</u>	<u>Unit of Measurement</u>	<u>50% of time</u>	<u>10% of time</u>
Arsenic	mg/l (kg/day)	0.01 (0.04)	0.02 (0.08)
Cadmium	mg/l (kg/day)	0.02 (0.08)	0.03 (0.12)
Total Chromium	mg/l (kg/day)	0.005 (0.02)	0.01 (0.04)
Copper	mg/l (kg/day)	0.2 (0.80)	0.3 (1.20)
Lead	mg/l (kg/day)	0.1 (0.40)	0.2 (0.80)
Mercury	mg/l (kg/day)	0.001 (0.004)	0.002 (0.008)
Nickel	mg/l (kg/day)	0.1 (0.40)	0.2 (0.80)
Silver	mg/l (kg/day)	0.02 (0.08)	0.04 (0.16)
Zinc	mg/l (kg/day)	0.3 (1.20)	0.5 (2.0)
Cyanide	mg/l (kg/day)	0.1 (0.40)	0.2 (0.80)
Phenolic Compounds	mg/l (kg/day)	0.5 (2.0)	1.0 (4.0)
Total Identifiable Chlorinated Hydrocarbons(b)	mg/l (kg/day)	0.002 (0.008)	0.004 (0.016)

(a) These limits are intended to be achieved through secondary treatment, source control and application of pretreatment standards.

(b) Total Identifiable Chlorinated Hydrocarbons shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, polychlorinated biphenyls, and other identifiable chlorinated hydrocarbons.

3. Wastewater within one foot of the surface of the ponds shall meet the following limits at all times:

- a. Dissolved Oxygen      2.0 mg/l minimum
- b. Dissolved Sulfide      0.1 mg/l maximum
- c. pH                      6.0 minimum  
                              9.0 maximum

4. A minimum freeboard of at least 2 feet shall be maintained in the ponds.

5. The ponds shall be protected against erosion, washout and flooding from a flood having a predicted frequency of once in 100 years.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the United States at any place:
  - a. Bottom deposits or aquatic growths;
  - b. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the United States at any place:
  - a. Dissolved oxygen      7.0 mg/l minimum
  - b. Dissolved sulfide      0.1 mg/l maximum
  - c. pH      Variation from natural ambient pH by more than 0.5 pH units.
3. The discharger shall operate the treatment facilities to maximize compliance with the following:
  - a. The discharge of waste shall not cause the following conditions to exist in waters of the United States at any place:
    - (1) Floating, suspended, or deposited macroscopic particulate matter or foam;
    - (2) Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
    - (3) Visible, floating, suspended or deposited oil or other products of petroleum origin.
  - b. The discharge of waste shall not cause the following limits to be exceeded in waters of the United States at any place:
    - (1) Nutrients      50 ug chlorophyll a/l, maximum
    - (2) Un-ionized ammonia      0.025 mg/l, annual median  
as N      0.4 mg/l, maximum
4. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

1. Neither the treatment nor the discharge of pollutants shall create a nuisance as defined in the California Water Code.
2. This Board's Order No. 74-140 and Resolution No. 79-6 are rescinded.
3. This Order includes the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977.
4. This Order expires on October 1, 1984, and the discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on **October 16, 1979**.

FRED H. DIERKER  
Executive Officer

Attachments:

Standard Provisions, Reporting Requirements  
and Definitions dated April 1977